

IN THE CLAIMS:

Please amend claims 1, 5-12 and 14, and add a new claim 15 as follows:

1. (Currently Amended) A data transfer method for a data processing system which allows both processes to be executed in a first data processor and in a second data processor to communicate with each other by direct data transfer between [[their]] user-spaces of the data processors, wherein
communication via a first virtual interface connection between a first process in the first data processor and a second process in the second data processor is taken over by a second virtual interface connection between a third process in the first data processor and the second process to continue the communication; the method comprising:
a first step in which the first process and the second process intermit the communication via the first virtual interface connection;
a second step in which [[a]] the second virtual interface connection is newly established between the third process and the second process in response to a request from the first process; and
a third step in which the second virtual interface connection takes over the communication from the first virtual interface connection in response to a request from the first process to continue the communication.
2. (Original) The data transfer method as defined in claim 1, wherein the third process is created by a process creating function.
3. (Original) The data transfer method as defined in claim 1, wherein the first step includes:
a procedure for the first process to issue a request for intermission of data transmission to the second process; and
a procedure for the second process to intermit data transfer to the first process in response to the request and, upon completion of intermission, issues a report of completion of intermission to the first process.

4. (Original) The data transfer method as defined in claim 3, wherein the first process memorizes the existence of operation for data reception after it requests the second process to intermit data transfer; and after it receives the report of completion of intermission, it copies the data received by the operation for data reception to the third process.
5. (Currently Amended) The data transfer method as defined in claim 1, wherein the second step includes a procedure for either the second process or the third process or both to report establishment of the second virtual interface connection to the first process.
6. (Currently Amended) The data transfer method as defined in claim 1, wherein issuance of a request for establishment of the second virtual interface connection at the second step is triggered by occurrence of an expected event in the first process.
7. (Currently Amended) The data transfer method as defined in claim 1, wherein issuance of a request for establishment of the second virtual interface connection at the second step is triggered by occurrence of an unexpected event in the first process.
8. (Currently Amended) The data transfer method as defined in claim 1, wherein the first process detects and memorizes occurrence of data reception in that process before the establishment of the second virtual interface connection.
9. (Currently Amended) The data transfer method as defined in claim 1, wherein, when the first process detects occurrence of reception of data in that process before the establishment of the second virtual interface connection, it issues a report of the detection to the third process.
10. (Currently Amended) The data transfer method as defined in claim 1, wherein, when the first process detects occurrence of reception of data in that process before the establishment of the second virtual interface connection and issues a report of the detection to the third process, the first process and the third process cooperate to copy the data from the first process to the third process.

11. (Currently Amended) The data transfer method as defined in claim 1, wherein the first virtual interface connection is turned off after the establishment of the second virtual interface connection.
12. (Currently Amended) A data processing system comprising a first data processor and a second data processor which are interconnected by a network, and allowing both processes to be executed in the first data processor and in the second data processor to communicate with each other by direct data transfer between [[their]] user-spaces of the data processors;
- the system further comprising:
- a first means by which the first process and the second process intermit the communication via [[the]] a first virtual interface connection;
- a second means by which a second virtual interface connection is newly established between the third process and the second process in response to a request from the first process; and ‘
- a third means by which the second virtual interface connection takes over the communication from the first virtual interface connection to continue it.
13. (Original) The data transfer method as defined in claim 1, wherein the method is implemented by an emulation library programmed so as to emulate the operation for socket communication and, communication can be made by executing the emulation library in the first and second data processors respectively, without the need for a change in user programs for socket communication to be executed by the first and second data processors respectively.

14. (Currently Amended) A computer-usable recording medium which stores an emulation library and a data transfer software program which allows both processes to be executed in a first data processor and in a second data processor to communicate with each other by direct data transfer between user-spaces of the data processors to implement a data transfer method by which communication via a first virtual interface connection between a first process in [[a]] the first data processor and a second process in [[a]] the second data processor is taken over by a second virtual interface connection between a third process in the first data processor and the second process to continue the communication;
- the method comprising:
- a first step in which the first process and the second process intermit the communication via the first virtual interface connection;
- a second step in which [[a]] the second virtual interface connection is newly established between the third process and the second process in response to a request from the first process; and
- a third step in which the second virtual interface connection takes over the communication from the first virtual interface connection in response to a request from the first process to continue it.
15. (New) A data transfer method for a data processing system which allows both processes to be executed in a first data processor and in a second data processor to communicate with each other by direct data transfer between user-spaces of the data processors, wherein
- communication via a first virtual interface connection between a first process in the first data processor and a second process in the second data processor is taken over by a second virtual interface connection between a third process in the first data processor and the second process to continue the communication,
- the method comprising the steps of:
- starting in the first process to memorize data received in the first process,
- intermitting the communication between the first process and the second process via the first virtual interface connection;

confirming in the first process and the second process intermits the communication via the first virtual interface connection;

copying, after the step of confirming, the memorized data received in the first process to be used in the third process,

establishing the second virtual interface connection between the third process and the second process in response to a request from the first process; and

taking over the communication from the first virtual interface connection to the second virtual interface connection in response to a request from the first process to continue the communication.